

**Supplementary Table 1** Age-adjusted and multiple-adjusted mean levels of pulmonary function parameters among US adults aged ≥20 years, by status of metabolic syndrome and its components and by body mass index category, National Health and Nutrition Examination Survey 2007-2010

Lung function parameter	Age-adjusted			Multiple-adjusted*		
	Metabolic syndrome		P-value	Metabolic syndrome		P-value
	Yes (N=92)	No (N=735)		Yes (N=92)	No (N=735)	
<b>Normal weight (18.5-<math>&lt;25</math> kg/m<math>^2</math>)</b>						
FEV1 (ml)	3442.0 (150.2)	3274.0 (32.1)	0.281	3349.1 (77.0)	3281.6 (26.9)	0.435
FEV1, % predicted	95.1 (1.9)	96.3 (0.7)	0.545	97.3 (1.6)	96.2 (0.6)	0.566
FVC (ml)	4367.2 (172.7)	4216.1 (40.4)	0.412	4214.4 (76.9)	4228.6 (32.1)	0.874
FVC, % predicted	97.8 (1.5)	100.4 (0.7)	0.133	99.8 (1.5)	100.2 (0.5)	0.790
FEV1/FVC (%)	78.2 (0.9)	77.7 (0.3)	0.510	78.8 (0.8)	77.6 (0.3)	0.139
<b>Abdominal obesity</b>						
	Yes (N=133)			Yes (N=133)		
FEV1 (ml)	3056.0 (45.5)	3314.0 (33.7)	<0.001	3393.1 (54.6)	3274.2 (24.6)	0.033
FEV1, % predicted	96.8 (1.3)	96.2 (0.7)	0.659	95.2 (1.3)	96.4 (0.6)	0.450
FVC (ml)	3901.0 (65.3)	4266.0 (41.0)	<0.001	4396.5 (78.1)	4207.6 (30.4)	0.027
FVC, % predicted	101.4 (1.6)	100.1 (0.7)	0.450	100.0 (1.7)	100.2 (0.5)	0.911
FEV1/FVC (%)	78.2 (0.8)	77.7 (0.3)	0.501	77.1 (0.7)	77.8 (0.3)	0.329
<b>Hypertriglyceridemia</b>						
	Yes (N=130)			Yes (N=130)		
FEV1 (ml)	3416.3 (99.3)	3265.3 (31.5)	0.151	3289.3 (54.6)	3286.3 (27.6)	0.963
FEV1, % predicted	94.9 (1.5)	96.5 (0.7)	0.410	96.7 (1.4)	96.2 (0.6)	0.746
FVC (ml)	4384.2 (113.2)	4201.6 (37.5)	0.124	4167.3 (51.1)	4237.5 (32.7)	0.247
FVC, % predicted	98.4 (1.2)	100.5 (0.7)	0.133	99.6 (1.1)	100.3 (0.6)	0.583
FEV1/FVC (%)	77.7 (0.8)	77.7 (0.3)	0.929	78.6 (0.7)	77.6 (0.3)	0.221
<b>Low HDLC</b>						
	Yes (N=140)			Yes (N=140)		
FEV1 (ml)	3216.7 (82.6)	3300.9 (35.5)	0.375	3252.0 (57.1)	3293.8 (28.1)	0.533
FEV1, % predicted	93.6 (1.6)	96.8 (0.7)	0.082	95.8 (1.6)	96.3 (0.6)	0.806
FVC (ml)	4201.4 (85.5)	4232.8 (46.6)	0.773	4207.5 (55.5)	4231.5 (34.4)	0.728
FVC, % predicted	98.7 (1.3)	100.5 (0.7)	0.229	100.4 (1.2)	100.2 (0.6)	0.858
FEV1/FVC (%)	76.5 (0.9)	78.0 (0.3)	0.134	77.2 (0.9)	77.8 (0.3)	0.519
<b>Elevated blood pressure</b>						
	Yes (N=146)			Yes (N=146)		
FEV1 (ml)	3259.7 (75.2)	3290.9 (32.8)	0.690	3263.3 (40.8)	3290.3 (25.9)	0.523
FEV1, % predicted	96.4 (1.4)	96.2 (0.6)	0.869	97.1 (1.2)	96.1 (0.5)	0.428
FVC (ml)	4189.8 (121.3)	4233.3 (38.5)	0.731	4192.2 (66.8)	4232.9 (30.9)	0.564

FVC, % predicted	100.9 (1.1)	100.1 (0.7)	0.509	101.6 (0.8)	100.0 (0.6)	0.121
FEV1/FVC (%)	77.4 (0.9)	77.8 (0.3)	0.669	77.4 (0.7)	77.8 (0.3)	0.631

	Hyperglycemia		P-value	Hyperglycemia		P-value
	Yes (N=267)	No (N=560)		Yes (N=267)	No (N=560)	
FEV1 (ml)	3406.9 (75.7)	3238.4 (37.2)	0.064	3247.0 (49.9)	3302.7 (29.1)	0.354
FEV1, % predicted	94.3 (1.4)	97.0 (0.7)	0.100	95.4 (1.1)	96.6 (0.7)	0.412
FVC (ml)	4468.4 (75.7)	4130.6 (48.9)	0.001	4245.7 (43.9)	4220.2 (37.2)	0.663
FVC, % predicted	99.4 (0.9)	100.5 (0.8)	0.339	100.7 (0.7)	100.0 (0.7)	0.463
FEV1/FVC (%)	76.2 (0.8)	78.4 (0.3)	0.013	76.5 (0.6)	78.2 (0.2)	0.010

### Overweight (25<30 kg/m<sup>2</sup>)

	Metabolic syndrome		P-value	Metabolic syndrome		P-value
	Yes (N=410)	No (N=692)		Yes (N=410)	No (N=692)	
FEV1 (ml)	3332.3 (56.5)	3358.2 (43.9)	0.695	3335.5 (35.0)	3356.7 (26.8)	0.482
FEV1, % predicted	95.3 (1.0)	97.5 (0.8)	0.044	95.5 (1.0)	97.4 (0.7)	0.077
FVC (ml)	4310.9 (77.3)	4372.5 (54.5)	0.511	4313.5 (49.7)	4371.3 (35.8)	0.218
FVC, % predicted	98.1 (0.9)	100.9 (0.8)	0.009	98.3 (0.9)	100.8 (0.7)	0.017
FEV1/FVC (%)	77.3 (0.4)	76.9 (0.3)	0.395	77.3 (0.3)	76.9 (0.3)	0.296

	Abdominal obesity		P-value	Abdominal obesity		P-value
	Yes (N=756)	No (N=346)		Yes (N=756)	No (N=346)	
FEV1 (ml)	3213.7 (38.9)	3550.0 (56.8)	<0.001	3381.6 (33.1)	3303.5 (39.7)	0.119
FEV1, % predicted	96.7 (0.7)	96.9 (1.2)	0.857	95.6 (0.7)	98.5 (1.0)	0.012
FVC (ml)	4162.5 (50.2)	4632.6 (71.0)	<0.001	4417.6 (42.0)	4257.9 (51.0)	0.010
FVC, % predicted	100.0 (0.6)	100.0 (1.2)	0.962	99.2 (0.7)	101.1 (1.0)	0.034
FEV1/FVC (%)	77.3 (0.3)	76.7 (0.4)	0.175	76.7 (0.4)	77.6 (0.4)	0.166

	Hypertriglyceridemia		P-value	Hypertriglyceridemia		P-value
	Yes (N=332)	No (N=770)		Yes (N=332)	No (N=770)	
FEV1 (ml)	3393.3 (64.9)	3331.5 (43.4)	0.411	3330.0 (35.9)	3358.4 (29.9)	0.478
FEV1, % predicted	95.8 (1.1)	97.2 (0.8)	0.216	96.5 (1.0)	96.9 (0.7)	0.602
FVC (ml)	4371.7 (82.2)	4344.9 (52.4)	0.778	4271.8 (46.6)	4387.4 (39.3)	0.030
FVC, % predicted	98.0 (1.0)	100.8 (0.8)	0.010	98.5 (0.9)	100.6 (0.8)	0.027
FEV1/FVC (%)	77.6 (0.3)	76.8 (0.3)	0.049	77.9 (0.3)	76.7 (0.3)	0.002

	Low HDLC		P-value	Low HDLC		P-value
	Yes (N=308)	No (N=794)		Yes (N=308)	No (N=794)	
FEV1 (ml)	3230.5 (57.9)	3396.6 (41.2)	0.012	3285.7 (37.8)	3375.0 (27.2)	0.015
FEV1, % predicted	94.6 (1.3)	97.6 (0.8)	0.031	95.4 (1.1)	97.4 (0.7)	0.090
FVC (ml)	4199.4 (79.8)	4412.8 (50.1)	0.021	4266.4 (57.1)	4386.7 (36.0)	0.040
FVC, % predicted	97.9 (1.1)	100.8 (0.8)	0.033	98.5 (1.0)	100.6 (0.8)	0.085

FEV1/FVC (%)	77.0 (0.6)	77.1 (0.2)	0.821	77.1 (0.5)	77.0 (0.2)	0.974
Elevated blood pressure						
	Yes (N=308)	No (N=794)		Yes (N=308)	No (N=794)	
FEV1 (ml)	3304.0 (93.0)	3364.8 (27.9)	0.470	3291.1 (53.4)	3368.9 (21.8)	0.081
FEV1, % predicted	94.4 (1.3)	97.5 (0.7)	0.014	94.9 (1.3)	97.4 (0.6)	0.044
FVC (ml)	4313.8 (119.6)	4365.5 (36.0)	0.652	4282.9 (68.1)	4375.4 (31.3)	0.129
FVC, % predicted	98.1 (1.2)	100.6 (0.8)	0.053	98.3 (1.2)	100.5 (0.7)	0.093
FEV1/FVC (%)	76.5 (0.5)	77.2 (0.3)	0.256	76.8 (0.4)	77.1 (0.3)	0.528
Hyperglycemia						
	Yes (N=578)	No (N=524)		Yes (N=578)	No (N=524)	
FEV1 (ml)	3450.7 (39.8)	3254.8 (53.8)	0.002	3339.6 (32.2)	3359.8 (34.1)	0.624
FEV1, % predicted	95.7 (1.0)	97.8 (0.8)	0.048	95.9 (0.9)	97.6 (0.8)	0.128
FVC (ml)	4496.0 (56.0)	4217.7 (69.5)	0.002	4338.8 (48.2)	4366.2 (43.2)	0.649
FVC, % predicted	98.9 (1.0)	101.0 (0.8)	0.034	99.1 (0.9)	100.8 (0.8)	0.085
FEV1/FVC (%)	76.9 (0.5)	77.2 (0.3)	0.707	77.1 (0.5)	77.0 (0.3)	0.766
<b>Obese (<math>\geq 30</math> kg/m<math>^2</math>)</b>						
Metabolic syndrome						
	Yes (N=737)	No (N=411)	P-value	Yes (N=737)	No (N=411)	P-value
FEV1 (ml)	3103.3 (39.7)	3154.2 (44.3)	0.404	3077.1 (25.0)	3197.5 (35.7)	0.013
FEV1, % predicted	92.1 (0.6)	96.8 (0.9)	<0.001	92.4 (0.6)	96.3 (0.8)	<0.001
FVC (ml)	3966.6 (54.3)	4035.5 (62.3)	0.387	3929.1 (33.0)	4097.6 (53.2)	0.014
FVC, % predicted	93.7 (0.6)	98.7 (0.9)	<0.001	94.0 (0.5)	98.3 (0.9)	<0.001
FEV1/FVC (%)	78.3 (0.3)	78.4 (0.4)	0.848	78.4 (0.2)	78.2 (0.4)	0.703
Abdominal obesity						
	Yes (N=1117)	No (N=31)		Yes (N=1117)	No (N=31)	
FEV1 (ml)	3114.3 (30.8)	3358.3 (128.9)	0.075	3127.9 (20.3)	2968.2 (116.9)	0.193
FEV1, % predicted	93.7 (0.5)	98.1 (3.5)	0.205	93.7 (0.5)	98.4 (3.6)	0.191
FVC (ml)	3981.7 (43.4)	4304.2 (160.8)	0.048	4001.0 (28.1)	3751.4 (122.8)	0.050
FVC, % predicted	95.4 (0.5)	99.9 (3.3)	0.175	95.4 (0.5)	99.9 (3.3)	0.163
FEV1/FVC (%)	78.3 (0.2)	77.7 (1.6)	0.706	78.3 (0.2)	78.5 (1.6)	0.874
Hypertriglyceridemia						
	Yes (N=436)	No (N=712)		Yes (N=436)	No (N=712)	
FEV1 (ml)	3080.2 (36.5)	3146.5 (42.7)	0.260	3059.4 (30.2)	3158.3 (31.6)	0.057
FEV1, % predicted	91.5 (0.6)	95.3 (0.8)	0.001	92.2 (0.6)	94.9 (0.8)	0.023
FVC (ml)	3947.9 (49.4)	4017.9 (59.5)	0.357	3915.1 (42.3)	4036.6 (42.0)	0.076
FVC, % predicted	93.2 (0.6)	96.9 (0.8)	0.001	93.9 (0.7)	96.6 (0.8)	0.023
FEV1/FVC (%)	78.1 (0.3)	78.4 (0.3)	0.481	78.3 (0.3)	78.3 (0.3)	0.944

	Low HDLC			Low HDLC		
	Yes (N=482)	No (N=666)		Yes (N=482)	No (N=666)	
FEV1 (ml)	3032.1 (44.5)	3190.2 (36.9)	0.009	3076.4 (31.4)	3157.0 (26.8)	0.071
FEV1, % predicted	91.3 (0.7)	95.8 (0.8)	<0.001	91.6 (0.7)	95.6 (0.8)	0.001
FVC (ml)	3869.6 (62.6)	4084.6 (52.3)	0.008	3930.0 (42.1)	4039.4 (38.5)	0.071
FVC, % predicted	92.8 (0.7)	97.6 (0.8)	<0.001	93.2 (0.7)	97.4 (0.8)	0.001
FEV1/FVC (%)	78.4 (0.4)	78.2 (0.3)	0.643	78.4 (0.3)	78.2 (0.3)	0.755
	Elevated blood pressure			Elevated blood pressure		
	Yes (N=507)	No (N=641)		Yes (N=507)	No (N=641)	
FEV1 (ml)	3074.5 (55.0)	3155.2 (39.9)	0.277	3074.1 (41.1)	3155.5 (25.7)	0.138
FEV1, % predicted	92.6 (1.0)	94.8 (0.7)	0.118	92.6 (1.0)	94.8 (0.7)	0.102
FVC (ml)	3933.3 (69.3)	4032.9 (62.1)	0.321	3934.2 (48.6)	4032.3 (40.1)	0.165
FVC, % predicted	94.2 (0.8)	96.5 (0.8)	0.058	94.2 (0.8)	96.5 (0.7)	0.053
FEV1/FVC (%)	78.4 (0.4)	78.2 (0.4)	0.785	78.4 (0.3)	78.3 (0.3)	0.826
	Hyperglycemia			Hyperglycemia		
	Yes (N=753)	No (N=395)		Yes (N=753)	No (N=395)	
FEV1 (ml)	3152.3 (46.4)	3072.2 (42.2)	0.246	3097.1 (26.3)	3165.3 (28.1)	0.090
FEV1, % predicted	92.5 (0.7)	96.2 (0.9)	0.003	92.9 (0.7)	95.6 (0.9)	0.026
FVC (ml)	4022.8 (58.3)	3941.5 (59.9)	0.319	3944.8 (30.3)	4073.0 (44.0)	0.014
FVC, % predicted	93.9 (0.5)	98.4 (0.9)	<0.001	94.2 (0.5)	97.9 (0.9)	0.001
FEV1/FVC (%)	78.4 (0.3)	78.1 (0.4)	0.631	78.6 (0.3)	77.9 (0.4)	0.262

FEV1 = forced expiratory volume in 1 second; FVC = forced vital capacity.

\*Adjusted for age, gender, race or ethnicity, educational status, smoking status, physical activity, alcohol use, and concentration of C-reactive protein.

†Models for metabolic syndrome were adjusted for age, gender, race or ethnicity, educational status, smoking status, physical activity, alcohol use, concentration of C-reactive protein, and body mass index.

Models for metabolic syndrome components were adjusted for age, gender, race or ethnicity, educational status, smoking status, physical activity, alcohol use, concentration of C-reactive protein, and other components of metabolic syndrome.

**Supplementary Table 2** Age-adjusted and multiple-adjusted mean levels of pulmonary function parameters among US adults aged ≥20 years, by number of metabolic syndrome components and by body mass index category, National Health and Nutrition Examination Survey 2007-2010

Lung function parameter	Number of metabolic syndrome components						P Wald chi-square
	0	1	2	3	4	5	
<b>Normal weight (18.5-<math>&lt;25</math> kg/m<math>^2</math>)</b>							
N	318	279	138	68	—	—	—
Age-adjusted	3240.8 (53.7)	3338.4 (63.8)	3224.5 (60.2)	3505.3 (167.9)	—‡	—‡	—
FEV1 (ml)	97.4 (1.2) 4109.5	96.1 (1.1) 4336.9	93.9 (1.0) 4245.7	95.3 (2.1) 4472.9	—‡	—‡	—
FEV1, % predicted	100.4 (1.1)	100.7 (1.1)	99.8 (1.3)	98.5 (1.5)	—‡	—‡	—
FVC (ml)	78.8 (0.4)	77.1 (0.6)	75.9 (1.0)	77.7 (1.1)	—‡	—‡	—
FEV1/FVC	3298.5 (40.3)	3275.2 (39.7)	3250.8 (45.3)	3362.9 (83.9)	—‡	—‡	—
Multiple-adjusted*	96.3 (1.1) 4206.1	96.3 (0.9) 4242.7	95.4 (1.0) 4259.2	97.4 (1.8) 4261.4	—‡	—‡	—
FEV1 (ml)	99.4 (1.0)	100.9 (0.9)	101.0 (1.0)	100.7 (1.4)	—‡	—‡	—
FEV1, % predicted	78.4 (0.4)	77.3 (0.5)	76.2 (0.9)	78.2 (1.0)	—‡	—‡	—
<b>Overweight (25-<math>&lt;30</math> kg/m<math>^2</math>)</b>							
N	91	267	334	248	121	41	
Age-adjusted	3524.2 (96.1)	3314.3 (60.5)	3342.3 (52.6)	3405.0 (69.8)	3166.8 (76.0)	3318.7 (165.6)	0.103
FEV1 (ml)	99.9 (1.6) 4568.4	98.3 (1.1) 4336.6	96.0 (1.1) 4339.6	96.4 (1.1) 4395.4	92.7 (1.7) 4082.7	95.4 (3.2) 4399.5	0.077
FEV1, % predicted	102.9 (1.6)	102.1 (1.0)	99.1 (1.0)	99.0 (1.1)	95.1 (1.4)	100.3 (2.4)	<0.001
FVC (ml)	77.0 (0.7)	76.7 (0.5)	77.1 (0.6)	77.4 (0.5)	77.7 (0.6)	75.4 (1.1)	0.417
FEV1/FVC	3444.2 (67.9)	3321.8 (38.2)	3358.0 (36.2)	3355.0 (34.9)	3267.3 (52.3)	3399.5 (116.2)	0.271
Multiple-adjusted*	100.7 (1.7)	97.7 (1.0)	96.0 (0.9)	96.4 (1.1)	92.6 (1.5)	97.1 (2.5)	0.763

FVC (ml)	4430.9 (72.9)	4361.4 (51.2)	4360.0 (50.9)	4325.7 (53.0)	4233.5 (69.8)	4461.3 (139.3)	0.066
FVC, % predicted	103.2 (1.5)	101.8 (0.9)	99.1 (0.9)	99.1 (1.1)	95.3 (1.3)	101.1 (2.0)	0.202
FEV1/FVC	77.6 (0.8)	76.4 (0.4)	77.2 (0.6)	77.5 (0.5)	77.3 (0.6)	76.3 (0.8)	0.141
<b>Obese (<math>\geq 30 \text{ kg/m}^2</math>)</b>							
N	—	130	270	360	247	130	
Age-adjusted							
FEV1 (ml)	—‡	3119.7 (77.8)	3155.5 (53.0)	3146.0 (53.1)	3091.7 (55.3)	2990.4 (84.8)	—
FEV1, % predicted	—‡	97.6 (1.2)	96.0 (1.0)	94.4 (0.8)	90.1 (1.0)	88.9 (1.5)	—
—‡	4001.7	4029.9	4008.0	3969.5	3826.2	—	
FVC (ml)	—‡	(110.5)	(62.5)	(73.9)	(76.4)	(119.2)	
FVC, % predicted	—‡	99.9 (1.1)	97.6 (1.0)	95.9 (0.8)	92.0 (1.0)	90.4 (1.6)	—
FEV1/FVC	—‡	78.2 (1.1)	78.5 (0.4)	78.4 (0.4)	78.0 (0.4)	78.3 (0.8)	—
Multiple-adjusted*							
FEV1 (ml)	—‡	3195.9 (62.2)	3212.5 (47.7)	3118.6 (28.8)	3060.9 (39.5)	2979.9 (53.2)	—
FEV1, % predicted	—‡	97.2 (1.2)	95.6 (0.9)	94.2 (0.8)	90.9 (1.0)	89.4 (1.2)	—
—‡	4107.1	4111.5	3969.7	3924.2	3812.2	—	
FVC (ml)	—‡	(88.5)	(55.1)	(35.4)	(54.9)	(80.3)	—
FVC, % predicted	—‡	99.5 (1.3)	97.3 (0.9)	95.6 (0.7)	92.7 (1.0)	91.0 (1.5)	—
FEV1/FVC	—‡	78.0 (1.0)	78.3 (0.4)	78.5 (0.4)	78.1 (0.3)	78.4 (0.7)	—

FEV1 = forced expiratory volume in 1 second; FVC = forced vital capacity.

\*Adjusted for age, gender, race or ethnicity, educational status, smoking status, physical activity, alcohol use, and concentration of C-reactive protein.

†Adjusted for age, gender, race or ethnicity, educational status, smoking status, physical activity, alcohol use, concentration of C-reactive protein, and body mass index.

‡Inadequate sample size.

**Supplementary Table 3** Age-adjusted and multiple-adjusted mean levels of pulmonary function parameters among US adults aged  $\geq 20$  years, by combinations of metabolic syndrome and diabetes status and by body mass index category, National Health and Nutrition Examination Survey 2007-2010

Lung function parameter	MetS -, DM -	MetS +, DM -	MetS -, DM +	MetS +, DM +	P Wald chi-square
<b>Normal weight (<math>18.5\text{-}25 \text{ kg/m}^2</math>)</b>					
N	712	66	23	26	
Age-adjusted					
FEV1 (ml)	3270.2 (32.7)	3515.9 (162.6)	—‡	—‡	0.288
FEV1, % predicted	96.4 (0.7)	98.2 (2.0)	—‡	—‡	<0.001
FVC (ml)	4212.5 (42.0)	4413.5 (191.1)	—‡	—‡	0.686
FVC, % predicted	100.5 (0.7)	100.0 (1.7)	—‡	—‡	<0.001
FEV1/FVC	77.7 (0.3)	79.3 (1.0)	—‡	—‡	0.129
Multiple-adjusted*					
FEV1 (ml)	3286.5 (27.4)	3463.6 (81.6)	—‡	—‡	<0.001
FEV1, % predicted	96.2 (0.6)	100.1 (1.8)	—‡	—‡	0.001
FVC (ml)	4237.9 (32.3)	4333.1 (84.7)	—‡	—‡	0.001
FVC, % predicted	100.3 (0.6)	102.1 (1.5)	—‡	—‡	0.001
FEV1/FVC	77.6 (0.3)	79.5 (1.0)	—‡	—‡	0.254
<b>Overweight (<math>25\text{-}&lt;30 \text{ kg/m}^2</math>)</b>					
N	660	311	32	99	
Age-adjusted					
FEV1 (ml)	3354.0 (45.0)	3339.9 (63.1)	3479.2 (102.1)	3291.5 (63.6)	0.250
FEV1, % predicted	97.5 (0.8)	95.5 (1.1)	97.0 (2.6)	94.4 (1.4)	0.186
FVC (ml)	4367.1 (56.1)	4328.4 (84.7)	4536.8 (146.2)	4209.9 (93.0)	0.224
FVC, % predicted	100.9 (0.8)	98.4 (1.0)	100.0 (2.8)	96.3 (1.2)	0.020
FEV1/FVC	76.9 (0.3)	77.2 (0.4)	77.0 (1.4)	78.2 (1.0)	0.661
Multiple-adjusted*					
FEV1 (ml)	3359.2 (26.5)	3335.1 (37.1)	3289.2 (140.6)	3334.1 (55.1)	0.886
FEV1, % predicted	97.4 (0.7)	95.6 (1.1)	97.6 (2.7)	95.4 (1.7)	0.355
FVC (ml)	4376.3 (35.0)	4319.7 (52.9)	4250.1 (181.9)	4264.7 (67.7)	0.424
FVC, % predicted	100.8 (0.7)	98.5 (1.0)	100.1 (2.7)	97.1 (1.4)	0.076
FEV1/FVC	76.9 (0.3)	77.2 (0.3)	77.7 (1.5)	78.3 (1.0)	0.440
<b>Obese (<math>\geq 30 \text{ kg/m}^2</math>)</b>					
N	390	491	21	246	
Age-adjusted					
FEV1 (ml)	3163.1 (45.4)	3168.7 (34.7)	—‡	2932.8 (72.9)	0.004

FEV1, % predicted	97.1 (0.9)	93.8 (0.6)	—‡	87.8 (1.3)	<0.001
FVC (ml)	4050.0 (62.1)	4074.4 (47.8)	—‡	3685.2 (96.3)	<0.001
FVC, % predicted	99.1 (0.9)	95.9 (0.6)	—‡	88.0 (1.2)	<0.001
FEV1/FVC	78.3 (0.4)	77.8 (0.3)	—‡	79.6 (0.5)	0.003
<b>Multiple-adjusted*</b>					
FEV1 (ml)	3205.2 (36.2)	3127.0 (23.7)	—‡	2946.5 (46.0)	<0.001
FEV1, % predicted	96.6 (0.8)	93.9 (0.7)	—‡	88.4 (1.3)	<0.001
FVC (ml)	4108.6 (53.5)	4015.1 (29.9)	—‡	3704.3 (57.9)	<0.001
FVC, % predicted	98.6 (1.0)	96.0 (0.6)	—‡	88.6 (1.2)	<0.001
FEV1/FVC	78.2 (0.4)	77.9 (0.3)	—‡	79.6 (0.4)	0.003

FEV1 = forced expiratory volume in 1 second; FVC = forced vital capacity; MetS = metabolic syndrome; DM = diabetes.

\*Adjusted for age, gender, race or ethnicity, educational status, smoking status, physical activity, alcohol use, and concentration of C-reactive protein.

†Adjusted for age, gender, race or ethnicity, educational status, smoking status, physical activity, alcohol use, concentration of C-reactive protein, and body mass index.

‡Inadequate sample size.